Claims

1. A numerical control apparatus for controlling machinability data selection comprising:
means operative in response to input data of a workpiece;
means of fuzzifications of said input data as input component;
fuzzy control means for effecting the inferencing fuzzy rules with a set of predefined fuzzy rules as inference component;
means of defuzzification of the yielded output; and
means of conveying the outputs in analog and/or digital form to the machining environment as the output component.

2. A numerical control apparatus for controlling machinability data selection comprising:
means operative in response to input data of a workpiece;
means of input data manipulation of said input data as input neurons;
a neural network for manipulating the multilayer neural network as inference component;
means of manipulating the yielded output; and
means of conveying the outputs in analog and/or digital form to the machining environment as the output component.

3. A numerical control apparatus for controlling machinability data selection comprising:
means operative in response to a plurality of input data of a workpiece for initialization;
a genetic algorithm means for operating said input data to produce new members;
means of manipulating the yielded output; and
means of choosing for the optimum population member.

4. The numerical control apparatus for controlling machinability data selection as claimed in any claim 1 to 3, wherein said input data includes of tool characteristics, workpiece characteristics and machining conditions.

5. The numerical control apparatus for controlling machinability data selection as claimed in claim 4, wherein said tool characteristics, workpiece characteristics and machining conditions are cutting speed, feed rate, hardness of said workpiece, tool materials and depth of cut.

6. The numerical control apparatus for controlling machinability data selection as claimed in any claim 1 to 3, wherein said output includes of machining conditions.

7. The numerical control apparatus for controlling machinability data selection as claimed in claim 6, wherein said machining conditions are cutting speed and feed rate.

8. The numerical control apparatus for controlling machinability data selection as claimed in any claim 1 to 7, wherein said output data can be used in face milling, end milling, turning, drilling and cutting.